

United States Patent [19]

Majidzadeh et al.

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[54] CONCRETE COMPOSITION

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Related U.S. Application Data

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abandoned, which is a continuation of Ser. No.
502,221, Aug. 30, 1974, abandoned.[51] Int. Cl.² C04B 7/35[52] U.S. Cl. 106/90; 106/95;
106/97; 106/107; 106/111; 106/117; 106/119[58] Field of Search 106/90, 94, 95, 97,
106/98, 107, 111, 117, 119; 260/29.6 S, 29.6 PS,
29.7, 42.13

[56] References Cited

U.S. PATENT DOCUMENTS

2,491,487 12/1949 Faulwetter 106/94

2,564,619	8/1951	Anderson	106/98
3,021,291	2/1962	Thiessen	260/29.6 S
3,711,431	1/1973	Vargiu et al.	260/29.6 S
3,733,285	5/1973	Steffy	260/29.6 S
3,847,630	11/1974	Compennass	106/90
3,869,295	3/1975	Bowles et al.	106/90
3,869,415	3/1975	Williams	106/94

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[57]

ABSTRACT

A curable concrete composition suitable for forming concrete having a high damping capacity is formed from sand, gravel, cement, and vegetable gum particles. In one embodiment, the vegetable gum particles are coated with a water based and/or water dispersable resin and a curing agent for the resin. In this embodiment, the relative concentration of resin and curing agents is controlled to cause substantially complete curing of the resin within about the same time necessary to substantially completely cure the concrete formed from the composition. In a second embodiment, an emulsion of vegetable gum is substituted for the solid vegetable gum particles.

45 Claims, No Drawings